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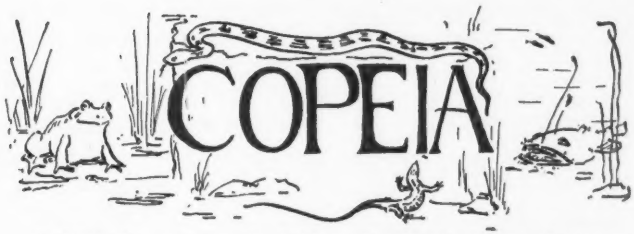

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TYLOSURUS ACUS IN NEW JERSEY.

A recent examination of the large examples of *Tylosurus* in the Academy of Natural Sciences of Philadelphia discloses that all those I referred previously to *T. raphidoma* (Ranzani) are really the present species. Additional material recently examined also shows that *T. acus* (Lacépède) is the common large gar of our off-shore pounds in summer. Comparison was made with examples from Sea Isle City and Ocean City, N. J., with others from Nantucket, Mass., and Italy. *T. acus* is, therefore, an addition to our local fish-fauna. So far, *T. raphidoma* is known in our limits only from the late Dr. Bean's record of the young, as *T. gladius* in 1887 at Ocean City, N. J.

Of other New Jersey fishes Dr. R. E. Van Deusen reports the following at Atlantic City during midsummer of the past season: *Carcharias taurus, Mustelus canis, Raja erinacea, R. eglanteria, Pomolobus mediocris, P. pseudoharengus, Brevoortia tyrannus, Conger conger* (largest 5ft.), *Fundulus majalis, Syngnathus fuscus, Caranx crysos, Selene vomer, Trachinotus carolinus* (12 adults), *Pomatomus saltatrix, Poronotus triacanthus, Roccus lineatus* (2), *Centropristis striatus, Orthopristis chrysopterus* (1 young), *Stenotomus chrysops, Lagodon rhomboides* (1), *Cynoscion regalis, Bairdiella chrysura, Leiosto-*

mus xanthurus, Micropogon undulatus, Sciaenops ocellatus (100 off Young's Pier in August), *Pogonias cromis, Tautoga onitis, Chætodipterus faber* (9), *Balistes carolinensis* (2 adults), *Alutera schœpfii, Spheroides maculatus, Chilomycterus schoepfii, Prionotus carolinus, P. evolans strigatus, Leptechenecis naucrates, Paralichthys dentatus, Achirus fasciatus* and *Phycis regius* (20). A small *Trichiurus lepturus* was obtained at Young's Pier on September 5th. Mr. S. C. Castner secured a fine adult *Lagocephalus lævigatus* and 2 *Leptecheneis naucrates* at Cape May in August. *Lagocephalus lævigatus* (1½ lbs.) was angled off Fortescue, June 12th, and *Lophius piscatorius* (of about 50 lbs.) was caught in lower Delaware Bay.

HENRY W. FOWLER,
Philadelphia, Pa.

FOOD DISCRIMINATION IN GERRHONOTUS.

Some time ago silkworms were being used in large numbers in our laboratories, for experiment purposes. Many of these were feeding in open traps. One morning, I noticed a number of the large silk glands, characteristic of these insects, strewn over one of the tables. When this had happened several mornings in succession, I determined to make an all-night vigil, if necessary, to determine how the silkworms were being thus reduced in number and what was so discriminating as to discard the silk glands.

Consequently, one evening, I settled down to work in one corner of the laboratory behind a screen. Very shortly, scarcely hearing any noise, but feeling that something was under way on the silkworm tables, I quietly moved my position to see what was going on. And there I saw, what I had least expected, a large lizard—*Gerrhonotus*, quietly beginning to make away with a soft juicy silkworm.

I was so intent on clapping a cage over the creature to capture him that I failed to observe his method of devouring his prey.

ISABEL MCCRACKEN,
Stanford University, Calif.

TOAD (*BUFO VULGARIS*) PROFUSION.

Having been informed that a great number of "frogs" were to be seen in a pond at Burtonwood near Warrington, Lancashire, I visited the place on March 24, 1918, and was very much surprised to find a large number of toads (*Bufo vulgaris*). There was not a solitary frog, nor any signs of frog spawn. I again visited the pond on March 25, together with Mr. Lin. Greening, and made the following observations:

"The water in the pond to a width of about 2 feet from the bank and the banks also, for some distance inland, were swarming with these Batrachians. In the small weedy bays around the pool I counted many groups. Three of the bays, measuring only 2 feet across, contained respectively the following numbers: 50 pairs, 40 pairs, and 30 pairs. The pond is roughly 300 feet in circumference, and the toads were all around in greater or lesser numbers. There was a great quantity of spawn and evidently many of the toads had left the pond. Many were also seen making their way towards the water. After counting many groups I made a calculation and estimated that the total number in the pond and on the banks was not less than 8,000; this in my opinion, being below rather than above the number seen."

I also visited several other ponds in the same locality and only in two were toads to be seen, and then only in small numbers. I spend much time in this neighborhood, and usually a very few toads are to be seen.

WILLIAM WEBSTER,
Warrington, England.

NOTE ON FOOD HABITS OF THE BULL SNAKE.

Recently I received a letter from Mr. Frank T. Merrill, a prominent citizen of Preston, Idaho, in which he relates an incident that illustrates the enormous feeding capacity of the western Bull Snake, presumably *Pituophis catenifer deserticola* Stejneger. In the summer of 1913, when the circumstance occurred, field mice were very numerous in an alfalfa field, where Mr. Merrill was working. A part of the communication follows:

"There were some young boys working with me, and one of them ran on to a large Blow Snake with its head and about two-thirds of its body under a pile of hay. This boy hit it with his fork. As soon as I saw what he was doing I called to him, but it was too late. I told him of the good the snake was doing and as he questioned it, I took the snake by the tail, made a whip cracker of it, [and killed it.] We took thirty-five small mice from its body. It seemed to like the very young mice best as nearly all of them were without hair, although some were one-third grown. This snake was five feet three inches long and was very large."

Just how many mice this snake was consuming daily is difficult to state, as digestion in reptiles usually proceeds more slowly than in the higher vertebrates. Nevertheless, observations generally have proved the beneficial habits of the Bull Snake, and every available source should be utilized in acquainting the public with these facts, as well as in affording protection to this useful reptile.

HERBERT J. PACK,
Farmington, Utah.

Edited by J. T. NICHOLS, American Museum of Natural History
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